
Little-known African Birds

Mascarene Paradise Flycatcher *Terpsiphone bourbonnensis*

Roger Safford

One of the most attractive of the endemic birds of the Mascarene Islands (Mauritius, Réunion and Rodrigues) is Mascarene Paradise Flycatcher *Terpsiphone bourbonnensis*. Its two subspecies occur on Mauritius (*desolata*) and Réunion (*bourbonnensis*). The former taxon is highly threatened, but attracts little attention due to its subspecific status. Its Réunion counterpart is also rarely mentioned because it is common. As a result, the whole species avoids both Red Data books and lists of single island endemics. The Mauritius form is slightly larger and darker both above and below; the purple gloss on the head is also more intense and extends further on to the nape². The differences are not striking, and until recently few would have suggested calling them separate species, although Salomonsen did so³. However, the current debate concerning the Phylogenetic Species Concept (under which Mauritius would have an endemic species, *T. desolata*) is helping to focus some attention on such forgotten taxa.

Plumage

Males lack the long tail streamers of the paradise flycatchers *Terpsiphone* spp of mainland Africa, Madagascar and Seychelles. The broad blue orbital ring, glossy blue-black crown and otherwise rufous and steely blue-grey plumage are all typical of the genus, but there is no obviously close relationship to any other species. Juveniles are distinctively plumaged, with whitish underparts and all-rufous upperparts until they moult, after which they resemble adult females.

Status and conservation

The author studied Mauritian birds in 1989–1993, and the information given here draws on these studies; the status of the flycatcher on Mauritius was summarised recently⁴. It has one of the most puzzling distributions of any Mauritian bird. In the upland forests of the south-west and central east, it seems to be heading for extinction, the available evidence pointing to a 50% decline since 1975. Pairs are widely



Male Mascarene Flycatcher *Terpsiphone bourbonnensis*
bourbonnensis, Roche Plate, Réunion, May 1991
(R.J. Safford)

scattered, leaving most habitat unoccupied, but at a few sites in this area, clusters of several pairs are found. One of these is in a grove of introduced Japanese Red Cedar *Cryptomeria japonica*, mixed with and surrounded by native forest in the coldest, wettest part of Mauritius. The grove is known as Pigeon Wood, as it was the last breeding site of the Pink Pigeon *Columba mayeri*, which has, however, been reintroduced elsewhere. Exceptionally low nest predation rates have been found for the Mauritius Fody *Foudia rubra* in Pigeon Wood, and it seems certain that other species like the pigeon and flycatcher profit from this too.

A much larger subpopulation of flycatchers is found at Bras d'Eau, in the hot dry lowlands of the north-east, far from native forest. The birds inhabit a unique patchwork of experimental plantations of broadleaved species, and also the conifer *Araucaria cunninghamii* (all introduced). Population densities in Bras d'Eau and Pigeon Wood appeared similar. The Mauritian population was estimated to be 100–223 pairs, of which 66–89 pairs were at Bras d'Eau; no other site was known to hold more than five pairs. This seems strange: Bras d'Eau does not support any other native passerines except the Mascarene Grey White-eye *Zosterops borbonicus*, which is abundant throughout the island. Surely we would expect native

bird species to do best in the same areas, usually native forest; and if, like flycatchers, they are widespread, should their densities not indicate some preference for either uplands or lowlands, wet areas or dry? Evidently not!

The situation deserves further study, but the occupied areas do have factors in common, which might make them suitable for flycatchers: a relatively open but shaded understorey, perfect for flycatching, and abundance of flying insects (especially mosquitoes). Crucially but speculatively, I suggest that the exotic plantations at Bras d'Eau, like Pigeon Wood, are very poor habitat for introduced mammals (rats *Rattus* spp. and Crab-eating Macaques *Macaca fascicularis*), which are the major predators of Mauritian birds' nests. Consequently, predator densities are low, and nesting success high. If these conditions are met, other factors like climate and plant species composition may not matter. For native birds, there is nothing magical about native vegetation.

Flycatchers are much commoner on Réunion than on Mauritius, numbering perhaps 50,000 pairs¹. The absence of macaques is one factor favouring the flycatchers (and all other native birds), but population limiting factors are not known.

Ecology and breeding

The basic details of the biology of the Mauritius subspecies, summarised here, are provided by Anthony Cheke³ and France Staub⁶, and my own data. Flycatchers are typically monogamous, with adults remaining on territory and singing all year. The egg-laying season extends from September to at least January at both Bras d'Eau (13 clutches) and Pigeon Wood (six clutches or broods). In both uplands and lowlands, the clutch and brood sizes are usually three (including both clutches and three out of four broods that I saw), but occasionally two (one brood seen by me).

Both sexes nest-build, incubate and feed the young. The only nest I monitored for the entire breeding period took 29 days from clutch completion to the brood fledging. From this, and other nests monitored for parts of the cycle, the incubation and fledging periods must be 15–16 days and 13–14 days respectively. The young become independent c4–6 weeks after fledging, and appear to complete their post-juvenile moult (a partial one) at about the same time. None of eight fledged birds colour-ringed in

three nests in Pigeon Wood was seen after independence. Similar observations have been made at Bras d'Eau, and juvenile dispersal is the most likely explanation. Second broods may be laid soon after: I saw one laid 6–7 weeks after the first brood fledged. Third broods have not been recorded; perhaps the breeding season is too short. After one nest was robbed by a predator, a new nest was started within two days and the first egg of the repeat clutch was laid eight days later. Following the breeding season, adults undergo a complete moult.

Hints for visitors

Visitors to Mauritius may have great difficulty finding flycatchers in the south-west, and should head for Bras d'Eau. The *Araucaria* plantations are visible from afar and accessible via public roads. An hour or two should guarantee a sighting. Any sightings outside this area should be reported to the Mauritian Wildlife Foundation (formerly Mauritian Wildlife Fund) in Tamarin. On Réunion, flycatchers are common above St-Denis, the home of the Réunion Cuckoo-Shrike *Coracina newtoni*, among other places.

Acknowledgements

Thanks to Anthony Cheke, France Staub, and Carl Jones and the staff of the Mauritian Wildlife Foundation (formerly Mauritian Wildlife Fund) for useful discussion, and Colin Taylor for one of the photographs. 📷

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Royal Holloway Institute for Environmental Research,
Huntersdale, Callow Hill, Virginia Water, Surrey
GU25 4LN, UK.



Male Mascarene Flycatcher *Terpsiphone bourbonnensis desolata*, Pigeon Wood, Mauritius, November 1990 (Colin Taylor)



Friedmann's Lark *Mirafra pulpa* (David Pearson)



Friedmann's Lark *Mirafra pulpa* (Neil Baker)